WHAT IS CLAIMED IS:

1. A method for providing a network node with service reference information in an IP-based system using an IP telephony signalling protocol, wherein the method comprises the steps of:

adding service reference information to an IP telephony signalling protocol message; and

sending the IP telephony signalling protocol message to the network node.

2. A method according to claim 1, wherein said IP telephony signalling protocol message is a message initiating a session.

3. A method according to claim 1, the method further comprising the steps of:

routing a call to the network node via an entry point; and

performing said adding in the entry point.

4. A method according to claim 3, wherein at least the address of the entry point is added as service reference information to the IP telephony signalling protocol message.

5. A method according to claim 1, wherein said service reference information is CAMEL-related information, the method further comprising the steps of:

routing a call to the network node via an entry point;

generating a CAMEL call reference number for the call in the entry point; and

adding at least the CAMEL call reference number as said service reference information to the IP telephony signalling protocol message in the entry point.

6. A method according to claim 1, wherein said service reference information is CAMEL-related information, the method further comprising the steps of:

routing a call to the network node via an entry point;

generating a CAMEL call reference number for the call in the entry point; and

coding the CAMEL call reference number and the address of the entry point to a digit string; and

adding at least the digit string as service reference information to

the IP telephony signalling protocol message in the entry point.

7. A method according to claim 1, wherein said IP telephony signalling protocol message is a response message acknowledging a message invoking a session.

8. A method according to claim 7, the method further comprising the steps of:

receiving an IP telephony signalling protocol message in a network node serving a called subscriber; and

adding at least the address of said network node serving a called subscriber as service reference information to the response message.

9. A method according to claim 1, wherein said service reference information is CAMEL-related information and said IP telephony signalling protocol message is a response message acknowledging a message invoking a session, the method further comprising the steps of:

receiving an IP telephony signalling protocol message invoking a session in a network node serving a called subscriber;

generating a CAMEL call reference number for the call in said network node serving a called subscriber; and

adding at least the CAMEL call reference number as service reference information to the response message in said node serving a called subscriber.

10. A method according to claim 1, wherein said service reference information is CAMEL-related information and said IP telephony signalling protocol message is a response message acknowledging a message invoking a session, the method further comprising the steps of:

receiving an IP telephony signalling protocol message in a network node serving a called subscriber;

generating a CAMEL call reference number for the call in said network node serving a called subscriber;

coding the CAMEL call reference number and the address of said network node serving a called subscriber to a digit string; and

adding at least the digit string as service reference information to the response message.

11. A method according to claim 1, wherein said service reference information is OSA-related information.

12. A method according to claim 1, wherein said service reference

information is Parlay API-related information.

13. A method according to claim 1, wherein said IP telephony signalling protocol is SIP.

14. A method according to claim 1, wherein said IP telephony signalling protocol is H.323.

15. A method for providing a network node serving a called subscriber with CAMEL-related information in an IP-based system using SIP, wherein the method comprises the steps of:

routing a call to the network node via an entry point for the called subscriber;

generating a CAMEL call reference number for the call in the entry point;

adding at least the CAMEL call reference number and the address of the entry point as CAMEL-related information to the SIP INVITE message; and

sending the SIP INVITE message to the network node.

16. A method for providing a network node serving a called subscriber with CAMEL-related information in an IP-based system using SIP, wherein the method comprises the steps of:

routing a call to the network node via an entry point for the called subscriber;

generating a CAMEL call reference number for the call in the entry point;

coding the CAMEL call reference number and the address of the entry point in a digit string;

adding at least the digit string as CAMEL-related information to the SIP INVITE message; and

sending the SIP INVITE message to the network node.

17. A method for providing an IP-based system using SIP with CAMEL-related information, wherein the method comprises the steps of:

receiving a SIP INVITE message a network node serving a called subscriber from an entry point for the called subscriber;

generating a CAMEL call reference number for the call in the network node;

adding at least the CAMEL call reference number and the address of the network node as CAMEL-related information to a SIP response mes-

sage acknowledging SIP INVITE message; and

sending the SIP response message to the entry point.

18. A method for providing an IP-based system using SIP with CAMEL-related information, wherein the method comprises the steps of:

receiving a SIP INVITE message a network node serving a called subscriber from an entry point for the called subscriber;

generating a CAMEL call reference number for the call in the network node;

coding the CAMEL call reference number and the address of the network node in a digit string;

adding the digit string as CAMEL-related information to a SIP response message acknowledging the SIP INVITE message; and

sending the SIP response message to the entry point.

19. A method according to any one of the preceding claims, wherein the CAMEL-related information is added to the header of the IP telephony signalling protocol message.

20. A method according to any one of the preceding claims 1 to 18, wherein the CAMEL-related information is added to the body of the SIP message.

21. A communications system providing IP telephony, comprising at least

user equipment;

a first network node; and

a second network node,

wherein

the first network node is arranged to add service reference information relating to a call made to the user equipment to an IP telephony signalling protocol message and to send the IP telephony signalling protocol message to the second network node; and

the second network node is arranged to separate the service reference information from the IP telephony signalling protocol message.

22. A communications system according to claim 21, wherein

the first network node is arranged to add its address as service reference information to the IP telephony signalling protocol message.

23. A communications system according to claim 21, wherein

the communications system provides a CAMEL service; and

the first network node is arranged to generate a CAMEL call reference number and to add at least the generated CAMEL call reference number as service reference information to the IP telephony signalling protocol message.

24. A communications system using SIP for IP telephony and providing a CAMEL service, comprising at least

user equipment;

a first network node; and

a second network node,

wherein

the first network node is arranged to add CAMEL-related information relating to a call made to the user equipment to a SIP message and to send the SIP message to the second network node; and

the second network node is arranged to separate the CAMEL-related information from the SIP message.

25. A communications system according to claim 24, wherein

the first network node is arranged to generate a CAMEL call reference number and to add at least the CAMEL call reference number and its address as CAMEL-related information to the SIP message.

26. A communications system according to claim 24, wherein

the first network node is arranged to generate a CAMEL call reference number, to code at least the CAMEL call reference number and its own address to a digit string and to add at least the digit string as CAMEL-related information to the SIP message; and

the second network node is arranged to decode the digit string.

27. A communications system according to any one of the preceding claims 24 to 26, wherein the SIP message is a SIP INVITE message comprising CAMEL-related information in the header of the SIP INVITE message.

28. A communications system according to any one of the preceding claims 24 to 26, wherein the SIP message is a SIP INVITE message comprising CAMEL-related information in the body of the SIP INVITE message.

29. A communications system providing IP telephony, comprising at least

user equipment;

a first network node; and

a second network node,

wherein

the first network node is arranged to add first service reference information relating to a call made to the user equipment to an IP telephony signalling protocol message initiating a session, to send the IP telephony signalling protocol message initiating a session to the second network node, to receive a response message acknowledging the IP telephony signalling protocol message initiating a session and to separate second service reference information relating to the call from the SIP response message; and

the second network node is arranged to separate the first service reference information from the IP telephony signalling protocol message initiating a session, to add the second service reference information to the response message and to send the response message to the first network node.

30. A communications system using SIP for IP telephony and providing a CAMEL service, comprising at least

user equipment;

a first network node; and

a second network node,

wherein

the first network node is arranged to add first CAMEL-related information relating to a call made to the user equipment to a SIP INVITE message, to send the SIP INVITE message to the second network node, to receive a SIP response message acknowledging the SIP INVITE message and to separate second CAMEL-related information relating to the call from the SIP response message; and

the second network node is arranged to separate the first CAMEL-related information from the SIP INVITE message, to add the second CAMEL-related information to the SIP response message and to send the SIP response message to the first network node.

31. A communications system according to claim 30, wherein

the first CAMEL-related information includes at least the address of the first network node,

the second network node is further arranged to generate a CAMEL call reference number; and

the second CAMEL-related information includes at least the CAMEL call reference number.

32. A communications system according to claim 30, wherein

the first network node is further arranged to generate a CAMEL call reference number; and

the first CAMEL-related information includes at least the generated CAMEL call reference number; and

5   the second CAMEL-related information includes at least the address of the second network node.

33. A network node in a communications system providing IP telephony, wherein the network node comprises means for adding service reference information to an IP telephony signalling protocol message.

10   34. A network node in a communications system providing IP telephony, wherein the network node comprises means for separating service reference information from an IP telephony signalling protocol message.

35. A network node in a communications system using SIP and providing a CAMEL service, wherein the network node comprises means for

15   adding CAMEL-related information to a SIP message.

36. A network node in a communications system using SIP and providing a CAMEL service, wherein the network node comprises means for generating a CAMEL call reference number and means for adding at least the CAMEL call reference number as CAMEL-related information to a SIP mes-

20   sage.

37. A network node according to claim 33, 34 35 or 36, wherein the network node comprises a call state control function.